



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/533,842	03/23/2000	Michael Ficco	PD-990219	2213

20991 7590 08/26/2004

THE DIRECTV GROUP INC
PATENT DOCKET ADMINISTRATION RE/R11/A109
P O BOX 956
EL SEGUNDO, CA 90245-0956

EXAMINER

KOENIG, ANDREW Y

ART UNIT	PAPER NUMBER
----------	--------------

2611

DATE MAILED: 08/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/533,842

Applicant(s)

FICCO, MICHAEL

Examiner

Andrew Y Koenig

Art Unit

2611

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 June 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) 14-20 and 36-39 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 and 21-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-13 and 21-35 have been considered but are moot in view of the new ground(s) of rejection.

Claim Objections

2. Claims 24, 25 and 26 objected to because of the following informalities:
3. Claim 24 recites the limitation "said gathering" in line 2. There is insufficient antecedent basis for this limitation in the claim. For the rest of this action, "said gathering including" will be interpreted as "gathering includes."
4. Claim 25 recites the limitation "the selection factor" in line 2. There is insufficient antecedent basis for this limitation in the claim. For the rest of this action, "the selection factor" will be interpreted as "the locally produced selection factor."
5. Claim 26 recites the limitations "said selection factor" and "the selection factor" in lines 2 and 6, respectively. There is insufficient antecedent basis for this limitation in the claim. For the rest of this action, "said selection factor" and "the selection factor" will be interpreted as "said locally produced selection factor" and "the locally produced selection factor," respectively.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

Art Unit: 2611

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claim 24 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

8. Claim 24, of the amendment filed 10 June 2004, depends upon itself (claim 24). The examiner notes that claim 24 has the claim identifier of "original" for denoting an original claim, however, the original filed claim 24 depended from claim 23. Accordingly, for the rest of this office action, claim 24 will be interpreted as depending from claim 23.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

10. Claims 1-4, 6, 7, 10-13, 21, 22, 25, 26, and 28 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent 6,671,880 to Shah-Nazaroff et al. (Shah-Nazaroff).

Regarding claim 1, Shah-Nazaroff teaches receiving broadcast content at a local device (col. 2, ll. 5-15) proximate to the television/display device (fig. 5,

Art Unit: 2611

label 502, col. 5, ll. 47-57). Shah-Nazaroff teaches performing selective rendering based upon the user characteristics (col. 4, ll. 12-34), and inserting the programming (col. 3-4, ll. 62-11, fig. 2).

Regarding claim 2, Shah-Nazaroff teaches synchronizing the commercial with broadcasted material (coll. 3-4, ll. 62-11).

Regarding claim 3, Shah-Nazaroff teaches using information previously gathered to generate the selection factor (col. 4, ll. 12-34).

Regarding claim 4, Shah-Nazaroff teaches gathering information such as preference to comedy or action titles (col. 4, ll. 12-34), which equates to tracking content.

Regarding claim 6, Shah-Nazaroff teaches a profile with age and sex information, which is clearly entered directly or indirectly by a user interface device (col. 4, ll. 12-18).

Regarding claim 7, Shah-Nazaroff teaches selecting the commercial based up the selection factor (col. 4, ll. 19-34).

Regarding claim 10, Shah-Nazaroff teaches selecting an entire commercial, which equates to an entire broadcast content (col. 4, ll. 19-34).

Regarding claim 11, Shah-Nazaroff teaches adapting including assembling content from a plurality of broadcast contents according to the selection factor, wherein the programming is digital (col. 6, ll. 50-53), which is clearly sent in segments.

Regarding claim 12, Shah-Nazaroff teaches adapting including assembling content from a plurality of broadcast contents according to the

Art Unit: 2611

selection factor, wherein the programming is digital (col. 6, ll. 50-53), which is clearly sent in segments.

Regarding claim 13, Shah-Nazaroff teaches adapting including assembling content from a plurality of broadcast contents according to the selection factor, wherein the programming is digital (col. 6, ll. 50-53), which is clearly sent in segments.

Regarding claim 21, Shah-Nazaroff teaches the recipient as an individual (col. 2, ll. 5-10).

Regarding claim 22, Shah-Nazaroff teaches gathering age, sex, and other demographic data, which equates to gathering an identity.

Regarding claim 25, Shah-Nazaroff is silent on adjusting the to learn changes of the recipient.

Regarding claim 26, Shah-Nazaroff teaches a plurality of categories for categorizing the user, wherein at least one of the values of the categories is used to generate the programming (col. 4, ll. 12-34).

Regarding claim 28, Shah-Nazaroff teaches that the broadcast content is an advertisement and the selection factor is the advertisement selection factor (col. 4, ll. 12-34).

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which

Art Unit: 2611

said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 5 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,671,880 to Shah-Nazaroff et al. (Shah-Nazaroff) in view of U.S. Patent 5,945,988 to Williams et al. (Williams).

Regarding claim 5, Shah-Nazaroff is silent on gathering information from a database. Williams teaches gathering information and storing the information in a local database for retrieval (fig. 6, label 616, fig. 7, col. 13-14, ll. 45-3).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Shah-Nazaroff by gathering and retrieving information from the database as taught by Williams in order to efficiently access data and providing useful programming to the user.

Regarding claim 27, Shah-Nazaroff is silent on data mining. Official Notice is taken that data mining is well known in the art. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Shah-Nazaroff by data mining in order to identify user patterns thereby more efficiently targeting programming to users.

13. Claims 23 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,671,880 to Shah-Nazaroff et al. (Shah-Nazaroff) in view of U.S. Patent 6,530,083 to Liebenow.

Regarding claim 23, Shah-Nazaroff teaches is silent on a group of individuals. Liebenow teaches individual profiles for a plurality of users and merging the profiles when a group is present (Abstract). Therefore, it would have

Art Unit: 2611

been obvious to one of ordinary skill in the art at the time the invention was made to modify Shah-Nazaroff by using a profile for a group as taught by Liebenow in order to provide the optimum settings for the group.

Regarding claim 24, Shah-Nazaroff is silent on gathering the identity of the group. Liebenow teaches identifying all the users to identify the group (col. 2, ll. 50-57). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Shah-Nazaroff by identifying the group as taught by Liebenow in order to provide the optimum settings for the group and enhance the viewing experience.

14. Claims 8, 9, 29-31, 34, and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,671,880 to Shah-Nazaroff et al. (Shah-Nazaroff) in view of U.S. Patent Application Publication 2003/0135853 to Goldman et al. (Goldman).

Regarding claim 8, Shah-Nazaroff is silent on storing the commercials locally. Goldman teaches storing commercials locally in the ad repository (fig. 3C, label 268, pg. 6, para. 54). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Shah-Nazaroff by storing commercials locally as taught by Goldman in order to access the commercials at any time once they are stored thereby enabling the system to receive programming during non-peak times.

Regarding claim 9, Shah-Nazaroff teaches transmitting selectable segments to the local device (col. 4, ll. 45-47).

Art Unit: 2611

Regarding claim 29, Shah-Nazaroff teaches receiving broadcast content at a local device (col. 2, ll. 5-15) proximate to the television/display device (fig. 5, label 502, col. 5, ll. 47-57). Shah-Nazaroff teaches performing selective rendering based upon the user characteristics (col. 4, ll. 12-34), and inserting the programming (col. 3-4, ll. 62-11, fig. 2). Shah-Nazaroff teaches synchronization signal detectors in order to determine when to insert commercials (col. 3-4, ll. 62-11). Shah-Nazaroff is silent on a storage device for storing a plurality of content segments. Goldman teaches storing commercials (content segments) locally in the ad repository (fig. 3C, label 268, pg. 6, para. 54). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Shah-Nazaroff by storing commercials locally as taught by Goldman in order to access the commercials at any time once they are stored thereby enabling the system to receive programming during non-peak times.

Regarding claim 30, Shah-Nazaroff teaches a rendering system (104), which has the synchronization detector, where the rendering subsystem then selects between the broadcast feed and a commercial (col. 4, ll. 12-34).

Regarding claim 31, Shah-Nazaroff teaches a rendering system (104) for generating the selection factor for the recipient.

Regarding claim 33, Shah-Nazaroff teaches gathering information such as preference to comedy or action titles (col. 4, ll. 12-34), which equates to tracking content.

Art Unit: 2611

Regarding claim 34, Shah-Nazaroff teaches a user input device (532) (col. 6, ll. 10-21), wherein the inputs are used to generate the selection factor (col. 4, ll. 12-34).

Regarding claim 35, Shah-Nazaroff teaches that the broadcast content is an advertisement and the selection factor is the advertisement selection factor (col. 4, ll. 12-34).

15. Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,671,880 to Shah-Nazaroff et al. (Shah-Nazaroff) and U.S. Patent Application Publication 2003/0135853 to Goldman et al. (Goldman) in view of U.S. Patent 5,945,988 to Williams et al. (Williams).

Regarding claim 32, Shah-Nazaroff is silent on a database. Williams teaches gathering information and storing the information in a local database for retrieval (fig. 6, label 616, fig. 7, col. 13-14, ll. 45-3). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Shah-Nazaroff by gathering and retrieving information from the database as taught by Williams in order to efficiently access data and providing useful programming to the user.

16. Claims 1-13, 21, 22, and 25 – 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,002,393 to Hite et al. in view of U.S. Patent Application Publication 2003/0135853 to Goldman et al. (Goldman).

Art Unit: 2611

Regarding claim 1, Hite teaches inserting a commercial by tuning to the desired frequency (col. 4, ll. 10-13; col. 4, ll. 40-48) and by storing commercials in local storage (col. 5, ll. 7-17), which are received at a local device proximate to the display, which the content is to be displayed. Hite teaches instructions sent to the user (col. 4, ll. 10-14), which reads on a selection factor for a user based on collected information on the user (col. 3, ll. 17-29), which then adapts the broadcast content to the selection factor (col. 4, ll. 40-48; col. 5, ll. 7-14). However, Hite is silent on producing the information locally in that the information is received from the distributor. Goldman teaches that the advertisement selection by means of a locally produced selection factor and insertion may be conducted at the client system (Abstract, fig. 3C, pg. 6, para. 54-55). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Hite by generating a locally produced selection factor as taught by Goldman in order to ensure the privacy of the user with respect to television habits.

Regarding claim 2, Hite teaches a media origination facility synchronizing the adapted broadcast with other content (fig. 3, label 340, col. 8-9, ll. 60-1).

Regarding claim 3, Hite teaches gathering information from the user, and using the information to generate the instructions (claimed selection factor) (col. 2, ll. 44-65, col. 3, ll. 17-28).

Regarding claim 4, Hite teaches tracking content selected by the recipient, by gathering viewer reactions (col. 3, ll. 17-28), and using the information to

Art Unit: 2611

generate additional selection factors such as relevant commercials and detailed information about the same product or service.

Regarding claim 5, Hite teaches inputting information from a database (col. 7, ll. 7-35).

Regarding claim 6, Hite teaches inputting information from the recipient via a user interface device (col. 3, ll. 17-29, col. 10, ll. 56-59).

Regarding claim 7, Hite teaches inserting a commercial by tuning to the desired frequency (col. 4, ll. 10-13; col. 4, ll. 40-48) and by storing commercials in local storage (col. 5, ll. 7-17), which equates to selecting a content segment.

Regarding claim 8, Hite teaches storing selectable content segments in a local device (col. 5, ll. 7-17; col. 9, ll. 25-33).

Regarding claim 9, Hite teaches transmitting the commercials to the local device (col. 5, ll. 7-17).

Regarding claim 10, Hite teaches showing the entire commercial (col. 11, ll. 58-60), which equates to selecting an entire broadcast content.

Regarding claim 11, Hite teaches retrieving commercials from storage for display (col. 12, ll. 3-27), which reads on "assembling content from a plurality of broadcast content segments according to the selection factor"

Regarding claim 12, Hite teaches selecting the programs using the commercial processor (578), which selects the appropriate commercials for display (col. 4, ll. 36-39).

Art Unit: 2611

Regarding claim 13, Hite teaches selecting the programs using the commercial processor (578), which selects the appropriate commercials for display (col. 4, ll. 36-39).

Regarding claim 21, Hite teaches a recipient as an individual (abstract, col. 1, ll. 7-10).

Regarding claim 22, Hite teaches gathering the identity of the individual (col. 6, ll. 9-13).

Regarding claim 25, Hite teaches adjusting the selection factor to accommodate changes (col. 3, ll. 17-29).

Regarding claim 26, Hite teaches a consumer database, which has a selection factor including a plurality of components, each categorizes a user based on needs and wants (col. 7, ll. 20-26), and using at least one category to generate a selection factor, using a programming database (col. 7, ll. 36-41).

Regarding claim 27, Hite is silent on data mining. Official Notice is taken that data mining is well known in the art. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Hite by data mining in order to identify user patterns thereby more efficiently targeting programming to users.

Regarding claim 28, Hite teaches commercials, which equate to advertisements.

17. Claims 23 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,002,393 to Hite et al. in view of U.S. Patent

Art Unit: 2611

6,530,083 to Liebenow and U.S. Patent Application Publication 2003/0135853 to Goldman et al.

Regarding claim 23, Hite teaches is silent on a group of individuals. Liebenow teaches individual profiles for a plurality of users and merging the profiles when a group is present (Abstract). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Hite by using a profile for a group as taught by Liebenow in order to provide the optimum settings for the group.

Regarding claim 24, Hite is silent on gathering the identity of the group. Liebenow teaches identifying all the users to identify the group (col. 2, ll. 50-57). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Hite by identifying the group as taught by Liebenow in order to provide the optimum settings for the group and enhance the viewing experience.

18. Claims 29-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,002,393 to Hite et al. in view of U.S. Patent 5,600,366 to Schulman and U.S. Patent Application Publication 2003/0135853 to Goldman et al.

Regarding claim 29, Hite teaches a local storage device (fig. 4, label 551), a commercial processor operably connected to a broadcast feed, storage device, and input device that reads on a selector (col. 4, ll. 49-56; fig. 5, label 578, fig. 6); wherein the selector selects programming and commercials from storage; but is

Art Unit: 2611

silent on a synchronization signal detector. Schulman teaches a cue detector (col. 7, ll. 23-33), which equates to a synchronization signal detector. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Hite by using a cue detector as taught by Schulman in order to seamlessly replace commercials in programming. Hite teaches instructions sent to the user (col. 4, ll. 10-14), which reads on a selection factor for a user based on collected information on the user (col. 3, ll. 17-29), which then adapts the broadcast content to the selection factor (col. 4, ll. 40-48; col. 5, ll. 7-14). However, Hite is silent on producing the information locally in that the information is received from the distributor. Goldman teaches that the advertisement selection by means of a locally produced selection factor and insertion may be conducted at the client system (Abstract, fig. 3C, pg. 6, para. 54-55). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Hite by generating a locally produced selection factor as taught by Goldman in order to ensure the privacy of the user with respect to television habits.

Regarding claim 30, Hite teaches a commercial processor (578), which selects the appropriate commercials for display (col. 4, ll. 36-39), thereby teaching selecting from the broadcast and storage, however, Hite is silent on the synchronization detector connected to the broadcast feed and the selector. Schulman teaches a cue detector, which equates to the synchronization signal detector operably coupled to the broadcast feed and selector (fig. 7, col. 7, ll. 23-33). Therefore, it would have been obvious to one of ordinary skill in the art at

Art Unit: 2611

the time the invention was made to modify Hite by coupling the detector to the broadcast feed and the selector as taught by Schulman in order to receive and store programming while facilitating commercial insertions.

Regarding claim 31, Hite teaches gathering information from the user, and using the information to generate the instructions (claimed selection factor) (col. 2, ll. 44-65, col. 3, ll. 17-28).

Regarding claim 32, Hite teaches inputting information from a database (col. 7, ll. 7-35).

Regarding claim 33, Hite teaches tracking content selected by the recipient, by gathering viewer reactions (col. 3, ll. 17-28), and using the information to generate additional selection factors such as relevant commercials and detailed information about the same product or service.

Regarding claim 34, Hite teaches inputting information from the recipient via a user interface device, wherein the selection is based on the user input (col. 3, ll. 17-29, col. 10, ll. 56-59).

Regarding claim 35, Hite teaches commercials, which equate to advertisements.

Conclusion

19. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

20. U.S. Patent 6,698,020 to Zigmond et al. teaches local ad insertion, see whole document.

Art Unit: 2611

21. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew Y Koenig whose telephone number is (703) 306-0399. The examiner can normally be reached on M-Th (7:30 - 6:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Grant can be reached on (703) 305-4755. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2611

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ayk

A handwritten signature in cursive script, appearing to read "HAITRAN", is written over three horizontal lines.

HAITRAN
PATENT EXAMINER